# Agenda

# Electric Distribution Transformation (EDT) FY04 Annual Program and Peer Review Meeting

October 28-30, 2003 Coronado Island Marriott Resort Coronado, California

### **Overview of Program**

#### Day 1: Tuesday, October 28

8:00 – 9:30 a.m.	Plenary Session
9:50 – 11:50 a.m.	Program Session 1: Distributed Sensing, Intelligence, and Control
11:50 – 1:00 p.m.	Luncheon
1:00 – 2:00 p.m.	Program Session 1 (continued): Distributed Sensing, Intelligence, and Control
2:00 – 5:30 p.m.	Program Session 2: Distribution Interconnection Standards and Technologies
6:00 – 7:30 p.m.	Reception

#### Day 2: Wednesday, October 29

7:30 – 9:30 a.m.	Optional Tour of SDG&E Mission Control Center Facility
9:45 – 11:35 a.m.	Program Session 3: System Architecture and Standards
11:35 – 12:05 p.m.	Program Session 4: Test Beds and Field Demonstrations
12:05 – 1:00 p.m.	Luncheon
1:00 – 6:30 p.m.	Program Session 4 (continued): Test Beds and Field Demonstrations

#### Day 3: Thursday, October 30

8:00 – 10:00 a.m.	Program Session 5: Distribution System Simulation and Analysis
10:20 – 12:20 p.m.	Program Session 6: Stakeholder and Institutional Adoption
12:20 p.m.	Adiourn

# Day 1, Morning: Tuesday, October 28

7:00 – 5:00 p.m.	Registration		
7:00 – 8:00 a.m.	Continental Breakfast		
	Plenary Session		
8:00 – 8:30 a.m.	Welcome and Vision/Technology Road Map of the Office of Electric Transmission and Distribution	William Parks	DOE
8:30 – 8:50 a.m.	Overview of the Programs, Activities, and Opportunities Sponsored by the New York State Energy Research and Development Authority (NYSERDA)	Joe Visalli	NYSERDA
8:50 – 9:10 a.m.	Overview of the Programs, Activities, and Opportunities Sponsored by the California Energy Commission Public Interest Energy Research (PIER) Program	Terry Surles	CEC
9:10 – 9:30 a.m.	Overview of the Electric Distribution Transformation Program's Objectives, Focus Areas, and Engagement Strategies	Eric Lightner	DOE
9:30 – 9:50 a.m.	Break		
9:30 — 9:50 a.m.	Program Session 1: Distributed Sensing, Intelligence, and Control Session Chair: Eric Lightner, DOE		
9:30 – 9:50 a.m. 9:50 – 10:20 a.m.	Program Session 1: Distributed Sensing, Intelligence, and Control	Matt Donnelly	PNNL
9:50 – 10:20 a.m.	Program Session 1: Distributed Sensing, Intelligence, and Control Session Chair: Eric Lightner, DOE Grid Friendly Appliances™ (GFA) Controller	Matt Donnelly  Victor Gorokhov/ Jim Foster	PNNL Electrotek/ NYSERDA
9:50 – 10:20 a.m. 10:20 – 10:50 a.m.	Program Session 1: Distributed Sensing, Intelligence, and Control Session Chair: Eric Lightner, DOE Grid Friendly Appliances™ (GFA) Controller Development	Victor Gorokhov/	Electrotek/
9:50 – 10:20 a.m. 10:20 – 10:50 a.m. 10:50 – 11:20 a.m.	Program Session 1: Distributed Sensing, Intelligence, and Control Session Chair: Eric Lightner, DOE  Grid Friendly Appliances™ (GFA) Controller Development  Aggregating Distributed Generators  Distributed Energy Neural Network Integration	Victor Gorokhov/ Jim Foster	Electrotek/ NYSERDA Orion Engineering

# Day 1, Afternoon: Tuesday, October 28

	Program Session 1 (continued): Distributed Sensing, Intelligence, and Control		
	Session Chair: Eric Lightner, DOE		
1:00 – 1:30 p.m.	Distributed Intelligent Agents for Decision Making at Local DER Levels	Gerald Gibson	Alternative Energy Systems Consulting, Inc./ SBIR
1:30 – 2:00 p.m.	Distributed Intelligent Agents for Decision Making at Local Distributed Energy Resource (DER) Levels	David Cohen	Infotility, Inc./ SBIR
	Program Session 2: Distribution Interconnection Standards and Technology	ologies	
	Session Chair: Brad Johnson, Consultant		
2:00 – 2:40 p.m.	Reliable, Low Cost Distributed Generator/Utility System Interconnect	Zhihong Ye	GE Global Research Center
2:40 – 3:10 p.m.	Innovative Distributed Power Interconnection and Control Systems	Karen DePodesta; Randy West	Gas Technology Institute; Encorp
3:10 – 3:30 p.m.	Break		
3:30 – 4:00 p.m.	Interconnection Standards Development	Tom Basso	NREL
4:00 – 4:30 p.m.	Development of a UL Standard for the Interconnection of Distributed Generation	Tim Zgonena	Underwriters Laboratories Inc.
4:30 – 5:00 p.m.	Certification Laboratory Pilot, Accreditation Plan, and Interconnection Agreement Handbook	Tom Key	EPRI PEAC Corp.
5:00 – 5:30 p.m.	IEEE P1547.2 Interconnection Applications Guide	Richard Friedman	Resource Dynamics Corp.

Reception — 6:00-7:30 p.m.

#### Day 2, Morning: Wednesday, October 29

7:00 - 5:00 p.m. Registration

7:00 - 8:00 a.m. Continental Breakfast

Optional Tour of SDG&E Mission Control Center Facility — 7:30-9:30 a.m.

**Program Session 3:** 

**System Architecture and Standards** 

Session Chair: Eric Lightner, DOE

9:45 – 10:25 a.m. Overview Don Von Dollen

Integrated Energy and Communications Systems

Architecture (IECSA)

10:25 – 11:05 a.m. Open Communication Architecture for Distributed Frank Goodman Electricity

Energy Resources in Advanced Distribution

Automation

11:05 – 11:35 a.m. GridWise Architecture and Standards Steve Widergren PNNL

**Program Session 4:** 

**Test Beds and Field Demonstrations** 

Session Chair: Paul Wang, CTC

11:35 – 12:05 p.m. Evaluation of the Field Performance of Fuel Cells Edward Torrero Cooperative

Research Network/ National Rural Electric Cooperative Association

Electricity Innovation

Institute

Innovation

Institute

Joe Hughes

12:05 – 1:00 p.m. Luncheon

# Day 2, Afternoon: Wednesday, October 29

## Program Session 4 (continued): Test Beds and Field Demonstrations

Session Chair: Paul Wang, CTC

1:00 – 1:40 p.m.	Interconnection Testing at NREL	Ben Kropos	ski	NREL
1:40 – 2:10 p.m.	Distribution Utility Integration Test (DUIT)	Susan Hor	gan	Distributed Utility Associates
2:10 – 2:40 p.m.	Microgrid Test Bed and Testing	Robert Las	seter	Univ. of Wisconsin
2:40 – 3:10 p.m.	System Integration of Distributed Power for Complete Building Systems	Robert Kra	mer	NiSource Energy Technologies
3:10 – 3:40 p.m.	UAI Outage Management System Deployment	Steve Haus	ser	Utility Automation Integrators, Inc.
3:40 – 4:00 p.m.	Break			
	Program Session 4 (continued): Test Beds and Field Demonstrations Session Chair: Dale Dietzel, DOE			
4:00 – 4:30 p.m.	Test Beds and Field Demonstrations	Skip Trimble		gyWorks North rica, LLC
4:00 – 4:30 p.m. 4:30 – 5:00 p.m.	Test Beds and Field Demonstrations Session Chair: Dale Dietzel, DOE  Cooperative Research and Development for	Skip Trimble Ali Ipakchi		rica, LLC
·	Test Beds and Field Demonstrations Session Chair: Dale Dietzel, DOE  Cooperative Research and Development for Advanced Communication and Control  Cooperative Research and Development for	·	Ame ALS	rica, LLC
4:30 – 5:00 p.m.	Test Beds and Field Demonstrations Session Chair: Dale Dietzel, DOE  Cooperative Research and Development for Advanced Communication and Control  Cooperative Research and Development for Advanced Applications  Cooperative Research and Development for	Ali Ipakchi	Ame ALS <sup>-</sup> Nxeg	rica, LLC ΓΟΜ gen, Inc. nected Energy

#### Day 3, Morning: Thursday, October 30

7:00 - Noon Registration 7:00 - 8:00 a.m. Continental Breakfast **Program Session 5: Distribution System Simulation and Analysis** Session Chair: Eric Lightner, DOE **PNNL** 8:00 - 8:30 a.m. Advanced Distribution Simulation Rob Pratt 8:30 - 9:00 a.m. Modeling the Effects of Integrating Distributed Energy Nick Miller **GE** Power Resources with the Electric Power System Systems 9:00 - 9:30 a.m. Hardware Demonstration of the Feasibility and Value Giri University of of Distributed Resources as a Solution to the Venkataramanan Wisconsin-Sensitive Load Problem Madison 9:30 - 10:00 a.m. Benefits Characterization of GridWise Walter Baer Rand 10:00 - 10:20 a.m. Break **Program Session 6:** Stakeholder and Institutional Adoption Session Chair: Gilbert Bindewald, DOE 10:20 - 10:50 a.m. GridWise Alliance and Stakeholder Engagement Landis **PNNL** Kannberg Gary Nakarado NREL 10:50 – 11:20 a.m. Regulatory and Institutional Issues Andrew Spahn NARUC 11:20 - 11:50 a.m. Technical Assistance to Regulatory Bodies Cheryl The Regulatory Assistance Harrington Project 11:50 – 12:20 p.m. Analysis and Development of Electric Utility Model Nat Treadway The Center for Rates and Tariffs Affecting DER the Advancement of Energy

Markets

Lunch on your own - Adjourn